

CITY OF LEICESTER
EDUCATION COMMITTEE

ANNUAL REPORT

OF THE MEDICAL OFFICER,
ALLAN WARNER, M.D., D.P.H.,

FOR THE YEAR 1921

F. P. ARMITAGE, M.A..

Director of Education.

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CITY OF LEICESTER.

AREA OF BOROUGH (in acres)	8,582
POPULATION (Estimated 1921)	237,900
NUMBER OF SCHOOLS	64
NUMBER OF DEPARTMENTS	109
AVERAGE ATTENDANCE	31,825
AVERAGE NUMBER ON THE SCHOOL REGISTERS ...	36,635

MEDICAL STAFF.

School Medical Officer.

A. WARNER, M.D., D.P.H.

Senior Assistant School Medical Officer.

A. C. TURNER, M.D., D.P.H.

Assistant School Medical Officers.

T. A. CARSON, M.B., B.Ch.

GLADYS HOPE COOK, M.B., Ch.B.

Ophthalmic Surgeons.

J. O. MUSSON, M.R.C.S., I.R.C.P.

C. C. H. BINNS, M.A., M.B., B.C.

Rural Surgeons.

A. I. MACLEOD, M.A., M.B., C.M.
(*Honorary Consulting Surgeon*).

J. KEEN, M.B., B.S., F.R.C.S.

Anæsthetist.

E. I. LILLEY, M.B., B.S., F.R.C.S.

Dental Surgeons.

W. MORGAN, L.D.S.

F. C. LITTLETON, L.D.S.

Instructress in Remedial Exercises.

M. E. ISON.

Resident Staff.

S. E. CORBETT, Matron.

E. M. CARTWRIGHT, Theatre Sister.

School Nurses.

E. A. COOPER.

H. CLARKE.

L. K. EDEN.

M. CANNON.

E. MEADOWS.

M. SHIRRAS.

A. BRINDLEY.

M. BURDEN.

B. SMITH.

L. G. BALL.

CITY OF LEICESTER EDUCATION COMMITTEE.

REPORT

OF THE SCHOOL MEDICAL OFFICER FOR THE YEAR ENDED 31st DECEMBER, 1921.

INTRODUCTION.

Considerable progress has been made in the work of the School Medical Service during the year 1921. There has not been a great increase in the number of children inspected, but there has been a marked improvement in the conditions under which the children's defects have been treated at the School Clinics and consequently the treatment has been more effective.

In January, 1921, Richmond House was opened as the Central School Clinic and Administrative Centre for the whole of the work of the School Medical Service. The arrangements made at this centre have proved to be suitable in every respect. The provision of an operating theatre and a ward for the patients to stay at least twenty-four hours after an operation has given the greatest satisfaction to everyone concerned.

With regard to Medical Inspection, there is a statutory obligation to examine three groups of Elementary Scholars each year, namely, "Entrants," "Intermediates" and "Leavers." In addition, children and young persons attending Secondary Schools, Junior Technical Schools and Continuation Schools should be inspected on admission, at twelve years of age, and each subsequent year of attendance at school. At the beginning of the year it was recognised that the existing medical staff was not sufficient to carry out all these examinations and at the same time the financial situation did not warrant any further medical appointments at present. It was therefore determined to continue to examine the three statutory groups of Elementary Scholars and to examine the children on admission, at twelve and fifteen years of age in the Secondary Schools. These examinations have been carried out during the year under review.

Such medical inspections have a two-fold object ; firstly, to ensure that the child is fit to attend school so that he may profit by the education offered, and secondly, as far as possible, to secure his fitness for adult life. In other words, medical inspection is but a means to an end—the development of healthy citizens. It is obvious that statistics with regard to the findings at these inspections form a valuable census of the incidence of disease among children. Also a survey of the relationship between the defects discovered and the school and home conditions give a useful indication of what ameliorative measures should be adopted in the prevention of disease in the future. But what is of greater importance to the individual is to secure treatment for the defects that are revealed. Hence one of the most important duties of the School Medical Service is to “follow up” the defective child until the defect is remedied by one means or another. When children are suffering from some acute well-defined disease most parents keep them at home as they are obviously unfit for school. Consequently the majority of defects found by the School Medical Officers are either unsuspected or are of a chronic character. A certain number of these defects are congenital and incurable, such as deafness, blindness and feeble-mindedness ; in such cases the educational curriculum must be modified to suit the needs of the child. But the majority of chronic defects are curable in youth by persistent and regular treatment and, if neglected, become incurable in adult life. For example, if a child be neglected who is suffering from a discharging ear he not only fails to get the full benefit of education owing to deafness, but, in adult life, tends to swell the ranks of the mentally and physically inefficient owing to his permanent disability. Soon after the institution of Medical Inspection in schools it became obvious that the general practitioner on the one hand has neither the time nor the necessary nursing staff to treat these chronic conditions and, on the other hand, the general hospitals and dispensaries, whilst making a limited provision for such treatment, could not possibly cope with the very large number of patients revealed by medical inspection. Consequently, many Education Authorities availed themselves of the powers conferred on them by the Medical Treatment Act, 1909, to establish centres for the treatment of certain defects. These centres are known as School Clinics.

They were started in Leicester in 1913, during which year 300 children were treated, since when this work has grown rapidly so that in 1921 over 8,000 children attended the clinics for treatment. There is no doubt that these clinics supply a distinct want and are keenly appreciated by the public. Indeed doctors, teachers and parents frequently send children for treatment of defects other than those for which the clinics are provided. It may be well therefore to state that these clinics are not meant in any way to supplant but to supplement the work of the general practitioner and are strictly confined to the treatment of certain defects which have been sanctioned by the Board of Education, namely, defects of the eyes, ears, nose, throat, skin and teeth, together with certain deformities which require remedial exercises. There is also a prevalent idea that any child may be treated at the school clinic free of charge, regardless of the family income. But under the Medical Treatment Act, 1909, it is obligatory on the part of the Local Authority to charge the parent of any child in respect of medical treatment provided, an amount not exceeding the cost, unless the parent is unable to pay. From the inception of school clinics in Leicester, the Local Authority has taken care to fulfil this obligation. To do so has of course involved considerable expense, for two Clinic Officers are employed who make careful enquiry as to income, arrange the appointments for treatment, and in the main collect the fees. During last year over a thousand pounds were collected for various medical services.

When a child is found to be defective, in the first place, the parents are advised to obtain treatment from their own doctor, but if the parents subsequently apply for treatment at the clinic, enquiry is made with regard to the family income. Should this exceed a certain limit, treatment is refused at the clinic, and parents are advised in what way they can best obtain it. Thus a child suffering from defective vision and whose parents can afford to pay a small fee, would not be dealt with at the clinic, but would be told to apply to the Public Medical Service for treatment. Dr. Henry, the oculist at that Institution, has for many years treated the visual defects of school children at a reduced fee. During last year he prescribed for 558 children under these auspices. Again, if the family income is below a certain limit,

the children may be treated free or at a small charge according to a scale which has been approved by the School Medical Service Committee.

The adoption of some such method as the above for determining what fee in proportion to income should be paid, appears to be implied in the Medical Treatment Act, 1909. This procedure not only ensures that poverty shall not debar anyone from the benefits of medical treatment but enables those who are in a position to pay, to contribute what they can and so to maintain a healthy spirit of independence.

I.—STAFF,

Very little change has taken place in the Medical Staff during the past year. There are four full-time Medical Officers who carry out all the inspection work, and, in addition, attend the clinics for skin diseases, minor ailments, and remedial exercises. There are also five part-time specialists. The services of Dr. Macleod, consulting Aural Surgeon, were required so seldom that in August he consented to hold his appointment for the future in an honorary capacity. Mr. Keen, the Aural Surgeon, devoted eleven half days each week to the aural clinics in the early part of the year, but since October the number of aural clinics held each week has been reduced to eight, as it was found that Mr. Keen could work more rapidly than was at first anticipated. Dr. Lilley, the anæsthetist, attends when he is required, which is approximately five half-days per week.

Drs. Binns and Musson, the oculists, attend the eye clinic each for one half-day per week.

In addition there are two full-time dentists, who carry out the dental inspection in the schools and treatment at the dental clinics.

There are twelve nurses on the staff. Each one takes some part in assisting at the treatment clinics. Two of the nurses live at Richmond House, one acting as Matron and the other as Theatre Sister. A third nurse is in Richmond House for night duty in the ward. The night work is shared by four nurses who take turns at being on duty for one month at a time. There are also two dental attendants who help the dentists at

the schools and the dental clinics. Enquiry into family income is carried out by two clinic officers who, together with two junior clerks, arrange for the regular supply of patients to the clinics, and in the main collect all the fees for medical service.

The clerical staff at the Central Office consists of one man and six women clerks.

II.—CO-ORDINATION.

The arrangement for the co-ordination of the work of the School Medical Service with that of the Health Service was dealt with in detail in my Annual Report for 1920.

III.—THE SCHOOL MEDICAL SERVICE IN RELATION TO PUBLIC ELEMENTARY SCHOOLS.

There have been no new schools or important alterations in the school buildings during the year so that the existing conditions are the same as those reported in 1920.

IV.—MEDICAL INSPECTION.

Routine medical inspection and the inspection of "special" children brought forward by the Head Teachers is carried out in the school premises, except in two instances where the accommodation is limited, the inspection in these cases being held in the adjoining parish rooms. An Inspection Clinic is also held for a part of each morning at Richmond House. The children are referred to the Clinic by the medical officers, teachers, attendance officers and parents.

(a) Age Groups.

Three groups of children were inspected during the year, viz:—entrants, children between eight and nine years of age, together with children between twelve and thirteen years of age and all who had not been examined after reaching the age of twelve.

[The statistical particulars are to be found in Table I. at the end of the Report.]

(b) Extent to which the Board's schedule of Medical Inspection has not been followed and the reasons for such departure.

The Board's schedule of Medical Inspection has been followed.

(c) Steps taken to secure the early ascertainment of crippling defects.

All children who are suffering from chronic illness or who are away from school for three months are examined by the School Medical Officer at the Inspection Clinic at least once a year and many of these children are seen each month. A record is kept of their defects from which a list of all crippled children not in attendance at school was made.

The total number of crippled children in the City of Leicester is 148 as compared with 227 in the previous year, the reduction being due to a large number having now reached the age of 14 years and consequently are no longer classified as school children. Of the 148 cases, 40 were due to tuberculosis, 47 to infantile paralysis, 12 to paralysis of cerebral origin, 11 to rickets, 24 to congenital deformity and trauma, and four to cardiac disease. It should be understood that only very severe cases of cardiac disease are counted as cripples.

Of the 148 cases, 107 were in attendance at the ordinary elementary schools, 17 were suitable for the cripple school, 16 were unsuitable for school at present, and eight were totally unfit for school.

(d) Statement shewing the extent to which disturbance of school arrangements was involved by the inspections.

Each child when inspected is withdrawn from school for about half an hour and when re-inspected for not more than a few minutes.

V.—FINDINGS OF MEDICAL INSPECTION.

(a) Uncleanliness.

The percentage number of children whose hair was found to be clean was 78·4 as compared with 76·2 per cent in the previous year. The percentage number of children who required bathing was 3·7 in 1920 and 2·7 in 1921.

(b) Minor Ailments.

Minor ailments of skin, eye, ear, etc., are included under the appropriate headings.

(c) Tonsils and Adenoids.

On routine inspection 1570 children were found to have slight enlargement of the tonsils, but these were not sufficiently serious to warrant treatment. In addition there were 491 cases that were referred for treatment, *i.e.* 4.5 per cent. There were also 108 cases referred for treatment who were discovered at the inspection clinic or amongst the "special" children.

(d) Tuberculosis.

Five cases of pulmonary tuberculosis were found on routine inspection, *i.e.* .05 per cent. There were also 8 non-pulmonary cases, *i.e.* .07 per cent.

All children known to have definite signs of pulmonary tuberculosis are excluded from school. They have been seen frequently at the inspection clinic during the year. The total number is 104, *i.e.* 53 boys and 51 girls.

(e) Skin Disease.

There were 138 cases of skin disease found on routine inspection. 68 of these were referred for treatment. In addition 2,505 special cases were referred for treatment.

(f) External Eye Disease.

177 cases of external eye disease were found on routine inspection. 38 of these and 99 special cases were referred for treatment.

(g) Vision.

Of the routine cases 3,112 were suffering from some defect of vision. In 725 cases they were referred for treatment and 67 were kept under observation. In addition 706 special cases were referred for treatment and 16 were kept under observation.

(h) Ear Disease and Hearing.

111 cases of ear disease and 113 of defective hearing were discovered on routine inspection. Of these 102 were referred for treatment and 6 were kept under observation. There were also 351 special cases referred for treatment and 51 kept under observation.

(i) Dental Defect.

2,999 children were found to have four or more decayed teeth. Of these 251 were referred for treatment together with 282 special cases. With the present dental staff it is impossible to deal with all the cases of dental defect so that the work of the Dental Clinic is confined, as far as possible, to the treatment of those cases discovered by the dentists in the course of their inspections at the schools.

(j) Crippling Defects.

24 cases of infantile paralysis, 4 cases of club-foot, and 6 cases of congenital deformity, were found on routine inspection. The total number of cripples examined during the year was 148.

(k) Clothing.

Of the children inspected during 1921, 98·7 per cent were found to have satisfactory clothing, whilst 1·2 per cent were found to have poor or very bad boots. On re-inspection an improved condition of boots was found in 90 per cent of the cases.

(l) Enlarged Thyroid.

The number of cases of enlargement of the thyroid gland discovered during the ordinary routine examinations of 1921 was 233 out of 11,922 children examined, being a percentage of 1·95. Of these 233 cases, 165 were classified as slight, and 68 as moderate or severe. These cases were distributed as follows :

	Number examined.	Number found.	Percentage.
Elementary Schools—Boys	5,498	32	·58
Girls	5,329	108	2·03
Secondary Schools—Boys	539	9	1·67
Girls	556	84	15·11
	<hr/> 11,922 <hr/>	<hr/> 233 <hr/>	<hr/> 1·95 <hr/>

The proportion of children suffering from this condition was less than in the previous year, when the very high figure of 2·49% was attained ; at the same time it is larger than in any preceding year except 1920.

VI.—INFECTIOUS DISEASE.

A review of the action taken to detect and prevent the spread of infectious disease was given in my last report.

The following cases were notified by the Head Teachers during the year. Chickenpox, 663 ; Diphtheria, 147 ; Scabies, 316 ; Measles, 634 ; Mumps, 663 ; Whooping Cough, 594 ; Ophthalmia, 6 ; Ringworm, 623 ; Scarlet Fever, 429 ; the actual number of cases of Scarlet Fever notified to the Medical Officer of Health, of children between 4 and 14 years of age, was 510.

It is gratifying to be able to report that, as compared with the previous year, there were fewer cases of each of the above-mentioned diseases in 1921. The reduction was most marked in the case of measles. In 1920 there was a serious epidemic of this disease when 3,150 cases occurred as compared with 634 in 1921. With regard to scabies there has been a steady decline in the prevalence of this disease during the last three years. The figures are as follows:—In 1919, 660 cases ; in 1920, 579 cases ; in 1921, 316 cases. The bath at the Tuberculosis Dispensary, established by the Sanitary Committee in 1918 with the object of treating these patients, has been in use throughout the year. The number of children treated at the bath was 210.

Impetigo has declined from 1,651 cases in 1920 to 1,022 cases in 1921.

Ringworm has also been less prevalent. The total number of cases being 1,061 in 1920 as compared with 863 in 1921.

VII.—FOLLOWING-UP.

Review of the arrangements for the following-up of children suffering from physical defects, including a summary of the work undertaken by the Nurses.

Children who are found to be suffering from defects are re-examined by the Medical Officers one month and three months after the original examination and, if the defect is not then remedied, it is carried forward into the following year for re-examination. When the defect has been remedied the case automatically passes into the hands of the school nurse.

There are twelve nurses on the staff, and as has already been stated, the whole time of three of the nurses is occupied in connection with the operations performed at Richmond House. Two other nurses confine their attention to the Chester Street Clinic and to assisting the Attendance Officers in the Willow Street area. The remaining seven nurses are occupied in the following duties :—

At Schools.

- (a) Systematic surveys under the Cleanliness Scheme.
- (b) Investigation of outbreaks of infectious disease.
- (c) Following up cases discharged from the clinic as cured, to see that there is no relapse, that spectacles are worn regularly, and breathing exercises maintained where necessary.

At the Clinics.

- (a) Attendance with the Medical Officers at the inspection clinic.
- (b) Attendance with the Medical Officers at the treatment clinic.
- (c) Treatment of minor ailments under the supervision of the Medical Officers.
- (d) Preparing the children for operation at Richmond House, and nursing the children after operations.

Visiting Homes.

- (a) Interviewing parents concerning defects found, such as uncleanliness, bad clothing, etc.
- (b) Ascertaining cause of irregular attendance at the clinics.
- (c) Children who have had an operation at the clinic are visited by a nurse two days after the operation.

Visiting the Feeding Centres.

Nurses periodically visit these centres and, in certain cases, weigh the children. They also visit the homes of children who are unable to come to the centre owing to illness.

A summary of the work of the school nurses is shown in the table below :—

(1) Total number of visits paid to Schools	...	...	892
(2) Total number of examinations of children		...	80,692
(3) Total number of individual children found unclean		...	4,385
(4) Total number of children sent home (Dirty Body)	once		100
	twice		14
	three times		9
	(Dirty Head) once		1,158
	twice		159
	three times		74
(5) Total number of homes visited	...	...	7,338
(6) Total number of children found with poor boots		...	615
(7) Total number of children found with poor clothing		...	1,433

In last year's report an account was given of the employment of two nurses in assisting the Attendance Officer in the Willow Street district. The same arrangements have been successfully continued throughout the past year. The district in question is one of the poorest in the city, and in many instances both parents go out to work, consequently children suffering from comparatively trivial complaints receive little maternal care. Such neglect often causes an unimportant defect to develop into something more serious. Most people realise to-day that all cuts or abrasions of the skin should be cleaned and covered as soon as possible by some antiseptic or aseptic dressing, for failure to do so generally leads to a septic wound which takes a long time to heal, and often causes a large amount of unnecessary suffering and non-attendance at school. To meet the needs of such cases these nurses, under the supervision of Dr. Turner, hold a clinic at Chester Street for part of each morning for the purpose of treating minor ailments and to dress slight injuries. The number and nature of the defects thus treated are tabulated on page 21.

The second duty of these nurses consists in visiting the homes of the children in this area who are absent from school and who are alleged to be ill. There can be little doubt that in many respects a nurse is the most suitable person to visit these patients for she can hasten the recovery of the child, diminish

suffering, and promote early return to school. The following illustrative cases may be of interest :—

(1) A child absent from school on account of illness was found to have been vomiting for twenty-four hours. There was no doctor in attendance, but the nurse, recognising the urgency of the symptoms, had the child removed to the Infirmary, where he was operated on for appendicitis and made a successful recovery.

(2) Three children, the oldest being eleven years of age, were found, in a house, suffering from influenza. Both parents were out at work all day and no food was left for the children except some dry bread. The nurse visited again in the evening when the parents had returned. She told the mother she ought to stay at home when the children were ill or at least leave them with some suitable food. Visiting the next day she found the mother had gone to work but she had left the children a suitable milk pudding and a saucepanful of milk. Shortly afterwards a fourth child, an infant, who was usually put out to nurse, became infected and developed pneumonia. The mother was then induced to stay at home. The doctor in attendance advised the application of poultices, but as the mother was too ignorant to do this correctly, the nurse showed her how to make and apply a poultice.

(3) A child was found in bed with a quantity of pus exuding from the eyes—mother out at work. Nurse induced the parents to remove the child to the Infirmary where it was treated with injections, by which means the sight has been saved.

(4) A child dying from phthisis who had lost his mother was being looked after from time to time by a neighbour. Nurse obtained the assistance of the District Nurse who attended daily until the child died.

(5) On visiting certain children who were ill, nurse found that the mother who was suffering from cancer was being nursed in the room in which five children were living. The disease being extremely offensive, arrangements were made for meals to be taken in another room, for the windows to be opened, and the room scrubbed out with carbolic.

A nurse by her training and experience is in a position to judge whether alleged illness is genuine or not, and whether a doctor is required or not. In a great many instances the nurses have insisted on medical attendance when it would not otherwise have been obtained. They have arranged for children to go to the Royal Infirmary, to the North Evington Infirmary and to the Sanatorium. In other cases they have obtained the District Nurse, or have got help in the way of food from the Feeding Centres, or clothing by reference to the Charity Organisation Society. In these ways and many others they have hastened the recovery of the children and so they have come to be looked on by the parents, not so much as officials who demand attendance at school, but as friends in whom they can confide in times of illness. Not infrequently the nurses have been stopped in the street by mothers to ask their advice with regard to the physiological condition of their older girls, and thus an absence from school which would have been prolonged, has been materially curtailed. The following table shews the annual percentage attendance for the whole city and the Willow Street area during the last four years :—

YEAR	WHOLE CITY	WILLOW ST. AREA	REMARKS
1918	86·0	85·3	Nurses began assisting Attendance Officers May 1919.
1919	87·3	86·9	
1920	86·8	86·1	Severe measles epidemic.
1921	89·3	90·7	

It will be seen from the above table that the percentage attendance in the Willow Street area was below the average in 1918 and is above the average in 1921. No doubt there are many factors which influence regularity of attendance at school, so that it would be erroneous to suppose that the improved attendance in this area was entirely due to the nurses. But it is satisfactory to find that, as far as the limited experience goes, the employment of nurses in this way has not had the effect of reducing attendance at school.

VIII.—MEDICAL TREATMENT.

The facilities existing in the city for obtaining medical treatment were described in my last Annual Report, so that it is not necessary to repeat these facts. But since the Central School Clinic was opened at the beginning of the year, it may be useful to record what accommodation has been provided at this centre and to describe what arrangements have been made for nursing the in-patients

Richmond House is about a hundred years old and has been previously used as a private residence. To convert this into a small hospital involved considerable alteration. The pulling down of the motor house and erecting a two storeyed building on the site was perhaps the most expensive item. The ground floor of the new building forms a large waiting room for patients and attached to it are two lavatories. The upper floor consists of one large room which is furnished with suitable apparatus for the treatment of eye defects, skin defects, and minor ailments. The various clinics, of course, are held on different occasions. The chief alteration in the main building was the conversion of two bedrooms on the first floor into a ward capable of holding twelve beds. Another room on the same floor was made into an operating theatre. This involved putting down an impervious floor, making a new skylight, and providing all the necessary equipment for surgical operations. In addition, central heating, hot water, electric light and new gaspipes had to be installed throughout the building. Two new water closets and lavatory basins were provided and most of the drainage had to be renewed. Under the main building there is a large cellar which affords accommodation for all heating apparatus and for both domestic and clerical stores. On the ground floor are six rooms which are used for the following purposes:—(1) Chief Medical Officer's room. (2) Medical Staff room; this is also used for clerical purposes when not in use by the doctors. (3) a large room for clerical work. (4) A small room used by the Chief Clerk. (5) Nose, Ear and Throat Clinic. (6) Kitchen. The first floor consists of five rooms, namely, (1) Operating theatre. (2) Ward, (3) Small linen room. (4) Nurses' sitting room. (5) Bath room. The second floor consists of three bedrooms used by the Matron, Sister, and Ward Maid respectively. Considering that Richmond

House is near the centre of the city it has a good sized garden. This has proved useful for convalescent patients to sit in during the fine weather and a part of it will permit of some extension of the present buildings at a future date. A Matron, Theatre Sister, and Ward Maid reside on the premises and one of the non-resident nurses is on duty each night. A porter comes daily to look after the heating apparatus, to clean the offices and attend to the garden. He also assists in many other ways such as carrying the patients from the operating theatre to the ward. During last year 4,142 children made 13,112 visits to this Central Clinic. Of this number 1,162 were admitted to the ward for operative treatment under a general anaesthetic. The details of these cases will be found in Mr. Keen's report on page 22. Although the arrangements made for the surgical operation and after care of these patients are of quite a simple character, yet everything has been done to ensure that the treatment is both safe and effective. The majority of operations performed are for the removal of enlarged tonsils and adenoids, and the following is a resumé of the steps taken in each case :—

- (1) The parents apply in writing for treatment at the clinic.
- (2) The family income is investigated and treatment sanctioned according to scale.
- (3) The patient is seen at the throat clinic by the surgeon, who, when he thinks it necessary, advises an operation.
- (4) An appointment is made by the Clinic Officer for the child to attend at Richmond House for the operation. At the same time he leaves instructions as to the treatment of the child both before and after the operation.
- (5) The child is received by the Matron about 9 a.m., when he is put to bed. The operation is performed about 10 a.m. and the patient remains in bed until the following morning.
- (6) The parents fetch the child about 9 a.m., unless there is any reason for keeping the patient in the hospital longer.
- (7) On the following day a nurse visits the house, takes the temperature and reports to the surgeon.

- (8) Ten days after the operation the child is again seen at the clinic by the surgeon who instructs the parent how to give breathing exercises, etc.
- (9) When the child is discharged as cured, his name is given to the school nurse, who examines him occasionally to see that breathing exercises are practised.

In addition to Richmond House there are four other buildings used as School Clinics, namely :—

(1) *The Public Medical Service Rooms, Bond Street.*

At this centre arrangements are made for the use of a large waiting room and two clinic rooms where the dental clinics are held daily.

(2) *The Public Medical Service Rooms, Chester Street.*

These rooms are in a very poor part of the city and make an excellent centre for a skin and minor ailments clinic which is held daily.

(3) *The Town Hall.*

At this centre two rooms are provided for Remedial Exercises. The Clinic is held daily, except Saturday when the rooms are used for the examination of children of school age applying for employment certificates. Two rooms in the basement of this building are used for the treatment of ringworm by X-rays.

(4) *The Guest House.*

This is a very old building which is likely to be pulled down in the near future so that the arrangements in this instance are only of a temporary character. Three rooms are occupied at the top of the building for the following purposes :—(1) Waiting room. (2) Skin and Minor Ailments Clinic. (3) Woman Doctor's room.

Results of Treatment.

(a) *Minor Ailments.*

These are dealt with under the headings of Skin, External Eye Disease and Ear.

(b) Tonsils and Adenoids.

Details of the results of treatment for defects of the nose and throat will be found in Mr. Keen's report on page 22.

(c) Tuberculosis.

The Children's Sanatorium on the old Anstey Lane has been open for the reception of tuberculous patients throughout the past year. During this period 157 children have been admitted for treatment. The Education Committee, as in former years, have made provision for one teacher to be at the Sanatorium five days a week. I am indebted to the Matron for a weekly notification of the names and addresses of the children who have left the Sanatorium. All these patients, together with those discharged from the Sanatorium in 1920, have been recently examined, and the following table shows the number of these children who are now at school, etc. :—

CHILDREN DISCHARGED FROM THE SANATORIUM.

		1920.	1921.
At school	...	67	82
Not at school	...	33	46
Exempt	...	31	24
Dead	...	1	—
No trace	...	1	—
Sanatorium	...	3	—
Left district	...	2	1
		<hr/> 138	<hr/> 153
		<hr/>	<hr/>

(d) Skin Disease.

During the year there were 2573 cases of skin disease referred for treatment. Of these 2061 were remedied at the school clinic and 409 otherwise. In 30 cases no report was available, and at the end of the year 73 were still under treatment. The following table shews the number of attendances made at the Skin and Minor Ailments Clinics :—

SKIN AND MINOR AILMENTS CLINICS.

RICHMOND HOUSE.		GUEST HOUSE.		CHESTER STREET.		TOTAL.	
	Children.	Attendances.	Children.	Attendances.	Children.	Attendances.	
FOR TREATMENT—							
Ringworm	327	1,083	—	—	382	5,881	709 6,964
Scabies	—	—	99	429	63	592	162 1,021
Impetigo	1	6	156	440	753	6,553	910 6,999
Miscellaneous	—	—	98	241	255	1,828	353 2,069
TOTAL (Treatment)	328	1,089	353	1,110	1,453	14,854	2,134 17,053
FOR OBSERVATION—							
Ringworm	89	190	1	2			90 192
Scabies	—	—	90	209			90 209
Impetigo	—	—	34	63			34 63
Miscellaneous	6	6	64	117			70 123
TOTAL (Observation)	95	196	189	391			284 587
TOTAL (Treatment and Observation)	423	1,285	542	1,501	1,453	14,854	2,418 17,640

The number of cases of ringworm of the scalp treated by the X-rays was 80. In each case the whole of the scalp was irradiated so as to bring about complete epilation. The average number of days that elapsed before the child was free from infection was 28·5.

In addition one case of alopecia was treated by means of radiant heat.

(e) External Eye Disease.

There were 137 cases of external eye disease referred for treatment. Of these 65 were treated at the clinic and 43 otherwise. These were all remedied except one that was under treatment at the end of the year. Four cases were not treated and in 25 cases no report was available.

(f) Vision.

The number of cases referred for refraction was 1431. Of these, 696 were treated at the clinic and 260 otherwise. (Nearly all these cases were treated at the Public Medical Service Ophthalmic Department.) Of the 956 patients treated, 11 were found not to require glasses. Of the remaining 945, 927 were remedied by glasses.

(g) Ear Disease and Hearing.

There were 453 cases of ear defect referred for treatment. These were dealt with as follows:—

			Clinic.	Elsewhere.
Remedied	...	...	156	37
Improved	...	...	116	5
Unchanged	...	...	19	2
Commenced treatment	...		8	5
			<hr/> 299	<hr/> 49

In 64 cases no report is available at present. When the schools were last re-inspected, it was found that 41 cases had failed to obtain treatment, including seven where the parents definitely refused.

Mr. Keen reports as follows:—

The opening of an operating theatre and ward at Richmond House in January, 1921, gave much better facilities for aural

work than could possibly have been obtained by arrangement with any general hospital. Instead of returning home a few hours after operation, the children after removal of tonsils and adenoids are always kept in the hospital for twenty-four hours ; if necessary, longer. It has also been possible to admit a few cases of emergency mastoid conditions, an entirely new branch of work for the school clinic.

Tonsils and Adenoids.	Adenoids.	Sub-mucous Resection, etc	Single Mastoid.		Double Mastoid.
			Conservative.	Radical.	
841	223	34	23	27	14

A glance at the table will show the number of each type of operation performed.

It is satisfactory to be able to report that there have been no serious complications among the 1098 nose and throat operations (T. and A. 841, Adenoids 223, and S.M.R. 34). Hæmorrhage is the complication most dreaded in connection with these cases. The importance of this question loomed largely at the last B.M.A. meeting in Newcastle. Only six cases occurred among this number, being approximately 0.6%. In each case the hæmorrhage occurred within the first four hours after operation and the loss of blood amounted to anything from one to two pints. In no case was it necessary to administer a second anaesthetic and in everyone the hæmorrhage ceased after an injection of 2c.c. of a hæmostatic serum. These cases were kept an extra twenty-four hours and all made a normal if rather slower recovery. The routine administration of Calcium Lactate has not been found practicable. The staff is not large enough to allow of a nurse visiting each house to see that the drug is administered about twenty-four hours before the operation ; without this period, to allow for absorption, the drug could have no effect. Further, at the last B.M.A. meeting the general opinion was expressed that the routine administration of this drug was without effect in preventing the occurrence of these special cases. Investigation as to clotting time was made in any case where the parents reported a tendency to bleeding, but so far it has never been necessary to refuse operation for that reason.

The number of children who have undergone mastoid operations this year is 64. This is really a very small number of operations considering the extremely large number of cases of discharging ears examined and treated at the clinic. The practice at the clinic is as follows:—When a discharging ear case is examined any unhealthy condition of nose and throat is first of all remedied, while the ear is kept absolutely dry. This cures at least 50 per cent. More persistent cases undergo a course of daily cleaning of meatus with rectified spirit, followed by boric insufflations, which treatment may be continued for a maximum period of six to eight weeks. If the perforations and discharge still continue, then mastoid operation will have to be considered, the type of operation adopted depending largely on the amount of hearing present. If the hearing is only one to two inches (30" watch), an amount to be expected even after a radical mastoid operation, and especially if there are signs of labyrinth irritation (attacks of vertigo) or facial paresis, every aurist will agree that a radical mastoid is necessary. When the hearing is more than the above amount, especially when both ears are discharging, such a destructive operation is not justifiable in childhood, except when the strongest indications are present. The conservative operation (described by Mr. Heath), aiming at preserving the middle ear structures while at the same time removing diseased foci in the antrum and mastoid cells, seems an ideal middle course. The disease is surgically removed from that portion of mastoid where dangerous extensions usually occur while the hearing is preserved. This plan was adopted whenever possible—37 out of 64, in 14 of which the operation was done on both sides at one sitting. It is too early yet to speak of end results, but there is an impression that the operation has fully justified itself, and has come to stay. We hope next year to return to this question.

The importance and the danger of discharging ears is not yet fully recognised, and it is not certain that the best method of treatment has been found. The best method in this connection implies the quickest. A slow but progressive and permanent destruction of hearing results from neglected ear-discharge. The sooner this is arrested the more hearing is saved, and that is the main reason why suppurative otitis in childhood emphatically must be arrested.

(h) Dental Defects.

There is comparatively little conservative dentistry carried out for elementary school children except at the Dental Clinic. Particulars of the work done during 1921 will be found in Table IV. D.

IX.—OPEN-AIR EDUCATION.*(a) Playground Classes.*

A playground class has been carried on in connection with Mantle Road Infant Department on similar lines to those reported last year. The number of children on the register is 39.

In addition to the above, all the Head Teachers are asked to use the playgrounds for open air work whenever the weather permits. In many cases this is done to a valuable extent. Also St. Margaret's, St. Saviour's and Catherine Street Schools are permitted to use the churchyards in their immediate neighbourhood for quiet lessons. Arrangements were made during the summer for a number of classes to be held in the Abbey Park. The children who attended these classes were drawn from the Infant Departments of the following Schools: Elbow Lane, St. Luke's, Slater Street, Milton Street, Clyde Street, St. Patrick's, Christow Street, St. Mark's and Belgrave Road. Each of these schools was provided with army ground sheets upon which the children could sit during lessons.

(b) School Journeys.

During the year the following school journeys took place: Historical visits, 9. Art visits, 1. Nature rambles, 13.

(c) School Camps.

There are no school camps.

(d) Open Air Classrooms in Public Elementary Schools.

There are no special classrooms of this character.

(e) Day Open Air School.

There is no day open air school.

(f) Residential Open Air Schools.

LEICESTER POOR BOYS' AND GIRLS' SUMMER CAMP.

Among the many useful philanthropic agencies existing in Leicester there is probably none which gives greater pleasure to the children than the Leicester Camp Association. One of the chief objects of this society is to send a number of children each year to the seaside. Such a holiday is not only greatly appreciated by the children who are fortunate enough to be selected, but also does much to promote their mental and physical well being. Under these auspices 592 children were taken to Mablethorpe for a fortnight's stay last year. The enjoyment and profit of the holiday was greatly increased by the Education Committee providing two teachers who live near the camp and who give instruction to the children four hours daily. These lessons of course differ from the ordinary school curriculum and are mainly directed to increasing the children's observation and stimulating an interest in their new surroundings.

OPEN-AIR SCHOOL, MABLETHORPE.

Since the expense and difficulties of building made it impossible to carry out the suggested scheme of establishing an Open-air School in Leicester, the Medical Service Committee decided in the early part of the year to send a larger number of children to Mablethorpe than in previous years, with the hope that such procedure would, in some measure, meet the needs of the children who should have been in an Open-air School. It was decided to occupy the camp buildings for two months before the opening of the ordinary summer camp and again to use the buildings for three or four months at the end of the year. However, this arrangement was not carried out so far as the Autumn Camp was concerned for the Board of Education refused to give grant on any extension of this work. Seventy-nine children were sent to the camp in two batches, thirty-eight being boys and forty-one girls. The first batch of children left Leicester on March 19th the second returned on May 21st. The schools from which the children were selected were: Elbow Lane, Slater Street, St. Andrew's, Belgrave National, All Saints', St. John's, Ellis Avenue, King Richard's Road, Charnwood Street, St. Luke's, Holy Cross, Belper Street,

Granby Road, Hinckley Road and Lansdowne Road. The following table shews the physical defects found and also the number of children in whom such defects occurred :—

Anæmia	...	34	Enlarged Glands	29	
Bronchial Catarrh		33	Spinal Curvature	1	
Chorea	...	1	Rickets	...	1
Cardiac Disease		11	Conjunctivitis	...	1

The average gain in weight during the stay at Mablethorpe was three pounds. Two boys lost weight to the extent of one pound and half a pound respectively. One of these was a child suffering from chorea and heart disease. Although he failed to gain weight, his nervous condition was greatly improved by the rest. The other boy appeared to be quite well on his return and probably there was an error in the original weight. Notwithstanding that the school was open much earlier in the year than usual, the weather was very favourable and all the children derived great benefit from the change as was shewn by their general appearance and by the high percentage of physical defects which were remedied or improved.

X.—PHYSICAL TRAINING.

Description of the arrangement for associating the School Medical Service with the work of Physical Training in the schools, including a report by the Area Organiser of Physical Training.

The work of supervising the physical training is at present part of the general work of the Committee's Inspectors of schools. The whole of the Elementary Schools use the Board's Syllabus of Physical Exercises. During the year the Newarke Drill Hall and the Cook Memorial Hall have been constantly used for games and physical training. In this way, ample room has been provided for children attending small schools where there is no suitable drill hall.

If the School Medical Officers find any child suffering from a defect requiring special gymnastic treatment that can be carried out at the school, the Head Teacher's attention is drawn to the matter.

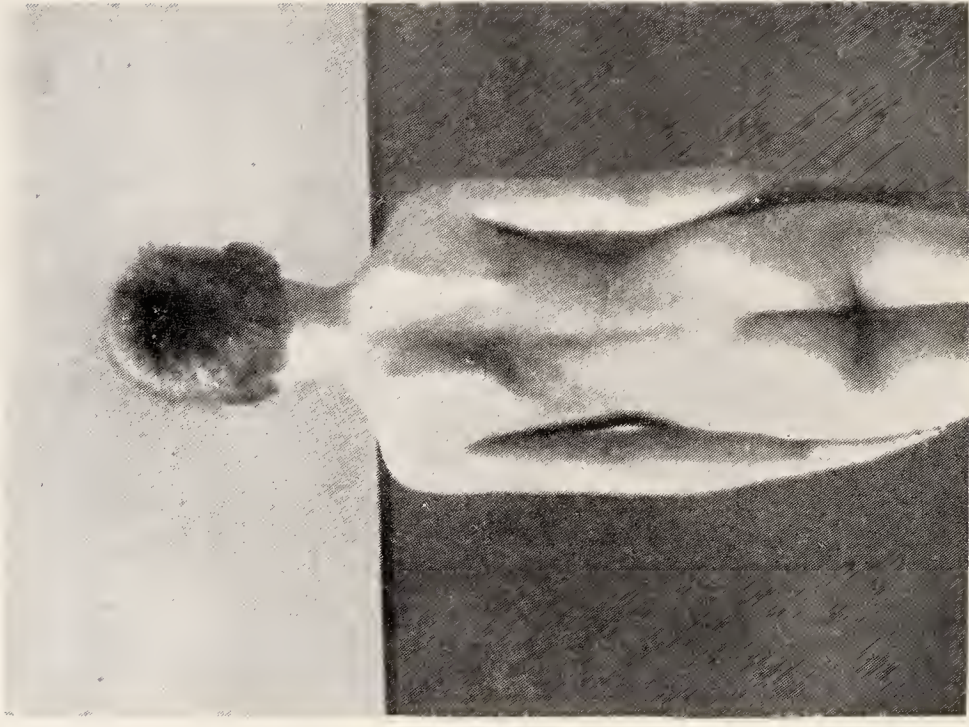
REMEDIAL EXERCISE CLINIC.

It has been felt for some time that a remedial exercise clinic was required for the treatment of certain children in the Elementary Schools but the defects revealed by inspection of pupils in the Secondary Schools has made the need more obvious. This remark specially applies to the Girls' Secondary Schools where the most common defects found are the different types of spinal curvature. These curvatures are largely due to the lack of muscular tone, the muscles of the back failing to take their proper share in maintaining the erect position. This muscular fatigue is particularly likely to occur in rapidly growing girls about the time of puberty. To regain muscular tone, massage and graduated exercises are required. There are certain advantages in this treatment being carried out at a school clinic, for the treatment is more like to be regular and persistent under school supervision and the time at which treatment is given can be arranged so as to prevent undue interference with school work. To meet these requirements a remedial exercise clinic was established in the Town Hall in the early part of last year. The actual treatment was carried out by Miss Newton from April to July when she resigned her appointment of Remedial Exercise Instructress. Since then Miss Ison has very successfully continued this work. The medical supervision with regard to the Elementary School children is carried out by Dr. Turner, and Dr. Gladys Cook has been responsible for the Secondary School girls.

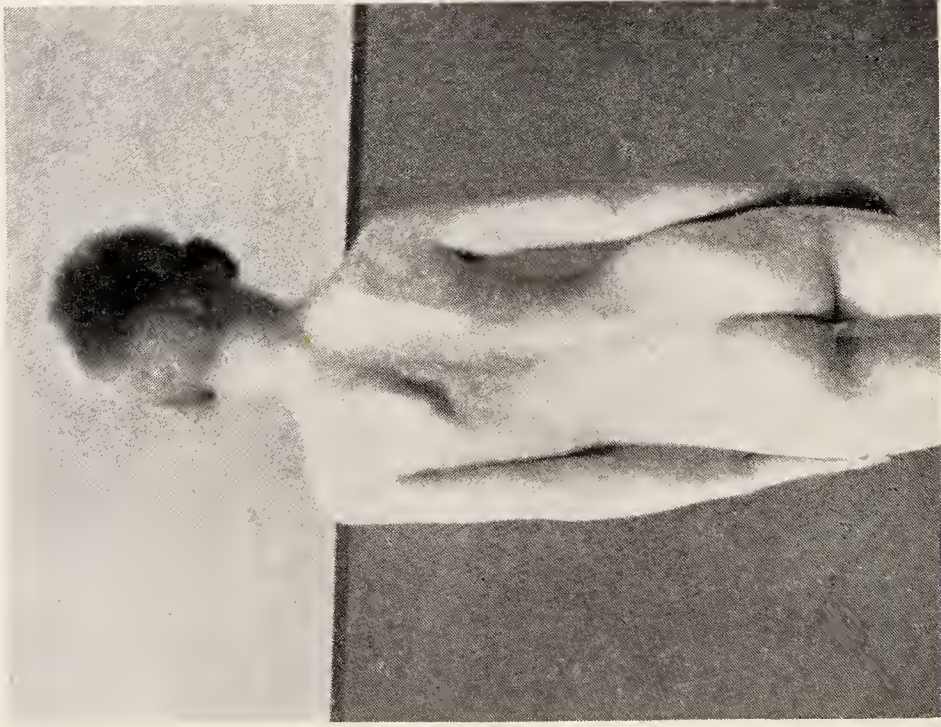
Dr. Turner reports as follows :—

“The Remedial Exercises Clinic was started at the Town Hall in April, the first patients being treated on April 5th. Treatment is given on five days a week, the mornings being reserved for boys and girls from the elementary schools and the afternoons for girls from the secondary schools. Secondary school boys who require remedial exercises do not come to the clinic but receive special treatment from the gymnastic instructors at the schools.

The more severe cases receive individual treatment and attend daily ; the slighter cases are grouped into classes of three or four and attend three times a week. Each session occupies



AFTER TREATMENT.
December, 1921.



BEFORE TREATMENT.
June, 1921.

half an hour, exclusive of the time occupied in dressing and undressing. In addition to the treatment given at the clinic each child is taught some simple exercises to be performed daily at home.

On completion of treatment each child is instructed to continue the daily exercises at home and to report at the clinic at regular intervals for observation. In some of the more severe cases considerable assistance has been obtained from X-ray photographs taken periodically, by means of which the progress made can be accurately estimated.

The number of applications for treatment received from the elementary schools was 33, 22 being girls and 11 boys. The defects from which these children suffered were :—

		BOYS.	GIRLS.	TOTAL.
Scoliosis	...	7	13	20
Kyphosis	...	—	4	4
Scoliosis and Kyphosis		—	4	4
Malformed chest	...	4	1	5
		<hr/>	<hr/>	<hr/>
Total	...	11	22	33
		<hr/>	<hr/>	<hr/>

In 28 of these cases the defect was slight or moderate in degree ; in the remaining 5 the deformity was severe.

Of the above-mentioned 33 children, 16 have completed their treatment, 12 are still under treatment, 4 are awaiting treatment, and one girl having proceeded to a secondary school has been transferred to the afternoon class.

The results of treatment are as follow :—

Number of children who have completed treatment.	Remedied.	Greatly improved.	Slightly improved.	Unchanged.
16	7	4	4	1

A good example of a child who has greatly improved after six months' treatment is shown in the accompanying photograph.

The 16 children who completed their treatment made in all 708 attendances, being an average of 44.25 attendances per child. The total number of attendances was 1,268."

Dr. Cook reports as follows :—

As already stated, the afternoons at the Remedial Exercises Clinic at the Town Hall are reserved for girls attending Secondary Schools, in particular the Newarke and Alderman Newton Girls' Schools. In the case of pupils belonging to the Wyggeston Girls' School, a special arrangement is in force whereby they do not attend the Town Hall, but receive treatment at their own school from a qualified Gymnastic Instructress on two mornings and three afternoons each week.

With regard to the clinic at the Town Hall, it should first of all be pointed out that as the morning session is longer than the afternoon session, more time is accordingly devoted to patients belonging to the Elementary Schools.

The afternoon clinic is conducted on practically the same lines as the morning one. The more severe cases of deformity, such as Scoliosis, Kyphosis, etc., receive individual attention and special treatment, including massage. These patients attend the clinic three times weekly, while the less severe cases who also attend thrice weekly are collected into groups of three or four. The actual treatment occupies half an hour, and in addition the girls are taught simple physical exercises which require to be practised at home each day. On completion of the prescribed course of treatment, each patient is instructed to continue the daily home exercises, and she is called upon by the doctor at regular intervals to report progress and to undergo inspection.

As it is not possible to carry out treatment at the clinic of many of the less severe cases of deformity which are met with in the course of school inspection, these children receive instruction from the Gymnastic Instructress in consultation with the doctor regarding remedial exercises to be carried out at home. These cases are also inspected by the doctor at regular intervals, and, if no improvement is taking place, are drafted in for clinic treatment in order of urgency. It has been found that many of these patients do exceedingly well on domiciliary treatment in conjunction with careful medical supervision from time to time. There were eleven cases of this description under observation at the end of the year.

The milder types of deformity, such as knock knee and flat foot, are too numerous to deal with at the clinic, and it has been found more satisfactory to devote the whole time at one's disposal to the correction of the more serious conditions already referred to.

The total number of patients who have received treatment since the inauguration of the clinic on May 2nd, 1921, has been 27, of whom 14 have already completed their course of treatment, and 13 still remain under treatment. These cases may be classified as follows:—

Scoliosis	...	19
Kyphosis	..	3
Scoliosis and Kyphosis	...	3
Deformity of Chest	...	2
		<hr/>
Total	...	27
		<hr/>

Twenty-one of the above were found to be "slight" or "moderate in degree," and six "severe."

The results of treatment, which are very satisfactory are as follows:—

Cured	...	1
Greatly Improved	..	13
Slightly Improved	...	13

Of the 14 children who have completed their treatment the average attendance per child was 30·5, while the total number of attendances during the eight months was 765.

XI.—PROVISION OF MEALS.

The four Feeding Centres in Newby Street, New Park Street, Bardolph Street and Orchard Street, which were opened in 1920, have continued to do useful work throughout the year 1921. A caterer supplies a mid-day meal on each day of the week except Sunday. The meal consists of either a meat or fish course and a pudding course, a different dinner being provided for each day of the month. The children are selected by the teachers or the medical officers or the parents make direct application. The family income in each case is investigated and if this proves to

be below a certain limit the child is granted a ticket for free meals. The children, when attending a centre, are under the supervision of a teacher, and one or two assistant teachers are also generally present. The medical officers and nurses have frequently visited these centres and have found the arrangements to be suitable and adequate. In the event of a child being ill, and consequently unable to attend the centre, the parents have been allowed to take the food home. All such cases are referred to the Medical Officer. If the child is absent from the centre for six days, the doctor or nurse visits the home to see that the child is away on reasonable grounds.

The number of individual children who received food during the year was 1,103 and the total number of meals supplied was 128,376.

XII.—SCHOOL BATHS.

The baths at Overton Road and Christow Street Schools have again proved very useful. The number of baths given during the year was 10420.

XIII.—CO-OPERATION OF PARENTS.

The parents are invited by letter to be present at the first medical inspection at the schools and to accompany the children when they visit the clinic either for inspection or treatment. In the case of inspection at school 57·2 per cent of the parents attended. No record is kept of the number of parents who attend the clinic, but in the majority of instances either a parent or guardian accompanies the patient.

XIV., XV., XVI.—CO-OPERATION OF TEACHERS, SCHOOL ATTENDANCE OFFICERS AND VOLUNTARY BODIES.

A description of the work carried out by the bodies referred to in Sections XIV., XV. and XVI. of the Board's Schedule was given in my last Annual Report.

XVII.—BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN.

(a) Methods employed in ascertaining the names of Special Children.

The Head Teachers and School Attendance Officers notify the Medical Officer of all cases of blindness and deafness. Children thought to be mentally deficient or epileptic are notified in accordance with the Model Arrangements, Section 31 (1) of the Mental Deficiency Act, 1913.

(b) Statement of the work of each Special School during the year.

BLIND.

The total number of blind children in Leicester between the ages of five and sixteen is twelve. Nine attend the special class for partially blind children in Leicester. Of the remaining three, two are imbeciles and are ineducable and one is deaf and dumb.

There are four men and three women receiving vocational training at the Leicester Institution for the Blind. In addition to the above, one boy and two girls are receiving higher education at the Royal Normal College for the Blind, Norwood.

The two classes in Leicester for the education of partially blind children have continued to do useful work. Five children have left school and five have been admitted during the year, leaving twenty-three on the rolls. Fourteen of these children are suffering from a high degree of myopia and are in the class for myopes. Nine are in the class for the semi-blind.

DEAF.

There are thirty-nine children attending the school for the deaf in Leicester. Six have been admitted during the year and seven have left.

MENTALLY DEFECTIVE AND EPILEPTIC.

1. *Ineducable*.—I have excluded fourteen children during the year as ineducable, making a total of thirty children of this class. Twenty-two are imbecile and eight epileptic.

2. *Feeble-minded*.—There are fifty-two children certified mentally deficient at the Willow Street Special School (three classes and four teachers). Fifteen children have left and eleven

have been admitted during the year. In addition there are forty-one mentally deficient children who are not certified attending the Elbow Lane Special Classes (two classes and two teachers).

3. *Backward*.—The class at Ingle Street School has continued to do useful work. Six children have passed into the upper school, seven have been admitted during the year and three have left, leaving eleven children on the register.

XVIII.—NURSERY SCHOOLS.

There are no Nursery Schools under the Leicester Education Committee.

XIX.—SECONDARY SCHOOLS.

Inspections at the Secondary Schools have been confined to children born in 1906 and 1909, together with all "entrants" to the Junior Wyggeston Girls' School. There are approximately 3,000 children in the Secondary Schools and it will be seen from table 1 on page 45 that rather more than one third of the pupils were examined last year.

The arrangements for the examination and treatment of these pupils is similar to those used for the pupils in the Elementary Schools. That is to say the examination takes place at the school; the parents are invited by letter to be present, and in the case of a defect being found the parents are advised to seek medical advice without delay. At the same time an opportunity is given to the parents to sign an application form for treatment at the school clinic in which a statement is made that they are not in a position to pay an ordinary fee. If such an application is made, the family income is duly investigated as in the case of a pupil at an Elementary School and treatment is given either free, at a reduced fee, or is refused in accordance with the scale of charges drawn up by the Medical Service Committee.

The number of children examined and the defects found will be seen on pages 45 and 48. The most noticeable feature about the defects is the high percentage of deformities discovered, but many of these are quite of a minor character.

XX.—CONTINUATION SCHOOLS.

With the present medical staff it has been impossible to arrange for the inspection of the pupils at the Technical Schools.

XXI.—EMPLOYMENT OF CHILDREN AND YOUNG PERSONS.

(i) *The co-ordination of the work of the School Medical Service with that of the Juvenile Employment Committee and of the certifying factory surgeon for the district.*

The School Medical Officers, when examining the “leavers” make a report with regard to the general health and physique of each child, on the Juvenile Employment Card.

There are two factory surgeons in Leicester, Dr. Binns and Dr. Lilley, both of whom are part time medical officers to the Education Committee, and both are constantly at the Central Clinic where all School Medical Records are kept. To these they can have access at any time. The names of children who are away from school suffering from chronic illness are placed on the Chronic Sickness Register. Arrangements are made to direct the factory surgeons’ attention to these children shortly before they are exempt from school by reason of age.

(ii) *Physical Condition of Employed Children.*

Dr. Turner has undertaken the examination of these children and reports as follows :—

During the year 1921 the number of school children examined with a view to their employment was 871 ; of these 840 were boys and 31 girls.

Certificates were granted or withheld as under :—

		BOYS.	GIRLS.	TOTAL.
Certificates granted	...	809	29	838
Certificates refused	...	40	2	42
		<hr/>	<hr/>	<hr/>
		849	31	880
		<hr/>	<hr/>	<hr/>

Nine boys who were temporarily unfit at the first examination were granted certificates on re-examination.

The occupations for which certificates were granted were :—

	BOYS.	GIRLS.	TOTAL.
Errands ...	492	15	507
Newspaper delivery ...	266	10	276
Milk delivery ...	18	—	18
Assisting in shop ...	12	3	15
House work ...	8	1	9
Van boy ...	7	—	7
Peeling potatoes ...	2	—	2
Lift boy ...	1	—	1
Librarian ...	1	—	1
Office cleaning ...	1	—	1
Assisting in warehouse	1	—	1
	<hr/> 809	<hr/> 29	<hr/> 838

The reason for which certificates were refused are summarized below :—

<i>Permanently unfit.</i>	CHILDREN.
Heart Disease ...	6
Spinal Curvature ...	4
Very poor physique ...	6
Suspected Phthisis ...	1
Hernia ...	1
Congenital dislocation of left hip	1
Corneal Ulcers ...	1
Unsuitability of proposed occupation	13
<i>Temporarily unfit.</i>	
Scabies ...	3
Impetigo ...	2
Wound of hand ...	1
Wound of leg ...	1
Scald of leg ...	1
Debility ...	1
	<hr/> 42

In thirteen cases the certificate was refused owing to the proposed work being of too strenuous a character for a child of twelve or thirteen. For eleven of these children the prospective occupation was the delivery of coal ; for another it was chopping firewood for sale ; in the remaining case it involved the carrying of two milk vessels each containing two and a half gallons.

In addition to the above figures one young person was examined for a Street Trader's licence.

XXII.—MISCELLANEOUS.

Examination of Scholarship Candidates, Teachers, and others.

During 1921, 108 new scholars for the Secondary Schools, 54 teachers, and 35 others were examined.

XXIII.—STATISTICAL TABLES.

ELEMENTARY SCHOOLS.

TABLE I.

NUMBER OF CHILDREN INSPECTED 1ST JANUARY, 1921, TO 31ST DECEMBER, 1921.

A.—ROUTINE MEDICAL INSPECTION.

	ENTRANTS.						INTER-MEDIATE GROUP.	LEAVERS.					
Age.	3	4	5	6	Other Ages.	Total.	8	12	13	14	Other Ages.	Total.	Grand Total.
Boys	209	615	1223	238	84	2369	1640	1356	126	7	--	1489	5498
Girls	171	573	1222	258	67	2291	1557	1333	142	6	—	1481	5329
Totals	380	1188	2445	496	151	4660	3197	2689	268	13	—	2970	10827

B.—SPECIAL INSPECTIONS.

	Special Cases.	Re-examinations (i.e. No. of children re-examined).
Boys ...	4321	3489
Girls ...	3859	3832
Totals ...	8180	7321

C.—TOTAL NUMBER OF INDIVIDUAL CHILDREN INSPECTED BY THE MEDICAL OFFICER, WHETHER AS ROUTINE OR SPECIAL CASES (no child being counted more than once in one year).

No. of Individual Children Inspected.
18,351

TABLE II.

RETURN OF DEFECTS FOUND IN THE COURSE OF MEDICAL INSPECTION, 1921.

DEFECT OR DISEASE.					ROUTINE INSPECTIONS.		SPECIALS.	
					Number referred for treatment.	Number requiring to be kept under observation, but not referred for treatment.	Number referred for treatment.	Number requiring to be kept under observation, but not referred for treatment.
(1)					(2)	(3)	(4)	(5)
Malnutrition					31	23	31	18
Uncleanliness :								
Head					151		225	
Body					5		24	
SKIN	...	{	Ringworm :					
			Head		13		792	
			Body		8		50	
			Scabies		6		253	
			Impetigo		36		986	
Other Diseases (Non-Tubercular) |					5		424	2
EYE	...	{	Blepharitis		28	1	68	1
			Conjunctivitis		8		15	
			Keratitis				2	
			Corneal Ulcer		1		5	
			Corneal Opacities		1			
			Defective Vision		640	66	656	15
			Squint		85	1	50	1
			Other Conditions			1	9	1
EAR	...	{	Defective Hearing		33	2	93	42
			Otitis Media		67	4	250	9
			Other Ear Diseases		2		8	
NOSE AND THROAT	...	{	Enlarged Tonsils		213	95	221	23
			Adenoids		68	4	210	4
			Enlarged Tonsils and Adenoids		179	3	604	4
			Other Conditions		31	9	53	8
ENLARGED CERVICAL GLANDS (Non-Tubercular)					2	2	11	2
DEFECTIVE SPEECH						1		2
TEETH	...		Dental Disease		251	1	282	1
HEART AND CIRCULATION	{	Heart Disease :						
		Organic }		11	85	25	171	
LUNGS	...	{	Functional }					
			Anæmia		11	6	66	8
	...	{	Bronchitis		53	14	66	10
			Other Non-Tubercular Diseases		21	28	20	15
TUBERCULOSIS	..	{	Pulmonary :					
			Definite		1	4	118	5
			Suspected		4	27	169	21
			Non-Pulmonary :					
			Glands			2	7	2
			Spine				10	3
			Hip			1	6	
			Other Bones and Joints		1		4	1
NERVOUS SYSTEM	...	{	Skin			1	3	
			Other Forms		1		11	
			Epilepsy		1		33	5
DEFORMITIES	{	Chorea		2		62	3	
		Other Conditions		2	8	37	101	
		Rickets		3	1	13	1	
	{	Spinal Curvature		25	14	20	7	
		Other Forms		24	12	21	6	
Other Defects and Diseases					68	37	195	50

Number of Individual Children having Defects which required Treatment
or to be kept under Observation ... 8,904

TABLE III.

NUMERICAL RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA.

			Boys.	Girls.	Total.
Blind (including partially blind), within the mean- ing of the Elementary Education (Blind and Deaf Children) Act 1893	Attending Public Elementary Schools ...				
	Attending Certified Schools for the Blind	14	9	23	
	Not at School	3	—	3	
Deaf and Dumb (including partially deaf), within the meaning of the Elementary Educa- tion (Blind and Deaf Children) Act, 1893.	Attending Public Elementary Schools ...				
	Attending Certified Schools for the Deaf	20	19	39	
	Not at School				
Mentally Deficient.	Feeble Minded.	Attending Public Elementary Schools ...			
		Attending Certified Schools for Mentally Defective Children ...	36	16	52
		Notified to the Local (Control) Authority during the year ...			
		Attending Uncertified Schools for Mentally Defective Children ...	26	15	41
		Not at School	28	17	45
	Imbeciles.	At School			
		Notified to Local (Control) Authority during year ...	11	6	17
		Not at School			
	Idiots.	Notified to Local (Control) Authority during year ...			
Epileptics.	Attending Public Elementary Schools ...	5	7	12	
	Attending Certified Schools for Epileptics				
	In Institutions other than Certified Schools ...				
	Not at School	14	13	27	

TABLE III (*continued*).

			Boys.	Girls.	Total.
Physically Defective.	Pulmonary Tuberculosis.	Attending Public Elementary Schools ...			
		Attending Certified Schools for Physically Defective Children ...			
		In Institutions other than Certified Schools ...			
		Not at School	53	51	104
	Crippling due to Tuberculosis.	Attending Public Elementary Schools ...	13	8	21
		Attending Certified Schools for Physically Defective Children ...			
		In Institutions other than Certified Schools ...			
		Not at School	9	5	14
	Crippling due to causes other than Tuberculosis, i.e., Paralysis, Rickets, Traumatism	Attending Public Elementary Schools ...	54	39	93
		Attending Certified Schools for Physically Defective Children ...			
		In Institutions other than Certified Schools ...			
		Not at School	8	12	20
*Dull or Backward.		Retarded 2 years ...	697	541	1238
		„ 3 „ ...	138	99	237

*These numbers refer to children who are 2 and 3 standards below the average.

TABLE IV.

TREATMENT OF DEFECTS OF CHILDREN DURING 1921.

A.—TREATMENT OF MINOR AILMENTS.

Disease or Defect.	Number of Children.			
	Referred for Treatment.	Treated.		
		Under Local Education Authority's Scheme.	Otherwise.	Total.
SKIN—				
Ringworm, Head }	863	709	146	855
Ringworm, Body }				
Scabies	259	162	93	255
Impetigo	1022	910	100	1010
Minor Injuries }	429	353	70	423
Other Skin Diseases }				
EAR DISEASE	453	*299	49	348
EYE DISEASE (external and other)	137	65	43	108
MISCELLANEOUS				

* Included in this figure were 64 mastoid operations of which 4 were cases from the Desford Industrial School.

B.—TREATMENT OF VISUAL DEFECT.

Number of Children.									
Referred for Refraction	Submitted to Refraction.				For whom Glasses were Prescribed	For whom Glasses were Provided	Recommended for Treatment other than by Glasses	Received other Forms of Treatment	For whom no Treatment was considered necessary
	Under Local Education Authority's Scheme Clinic or Hospital	By Private Practitioner or Hospital	Other-wise	Total					
1431	696	251	9	956	945	927			11

C.—TREATMENT OF DEFECTS OF NOSE AND THROAT.

Number of Children				
Referred for Treatment	Received Operative Treatment			Received other forms of Treatment
	Under Local Education Authority's Scheme--Clinic or Hospital	By Private Practitioner or Hospital	Total	
1579	1098	71	1169	18

Included in this table are 30 cases from the Desford Industrial School, and 12 cases from the Secondary Schools.

D.—TREATMENT OF DENTAL DEFECTS.

(1) NUMBER OF CHILDREN DEALT WITH.

	Age Groups.										'Specials'	Total.
	5	6	7	8	9	10	11	12	13	14		
(a) Inspected by Dentist ...	16	1356	1448	129	1152	1129	503	817	553	31	144	7278
(b) Referred for Treatment ...	—	633	969	60	630	730	310	512	364	23	--	4231
(c) Actually Treated												5727
*(d) Re-treated (result of periodical examination) ...												1859

* The number of children re-treated (d) is included in (c).

(2) PARTICULARS OF TIME GIVEN AND OF OPERATIONS UNDERTAKEN.

No. of Half Days devoted to Inspection.	No. of Half Days devoted to Treatment.	Total No. of attendances made by the Children at the Clinic.	No. of Permanent Teeth.		No. of Temporary Teeth.		Total No. of Fillings.	No. of Administrations of Anæsthetics included in (4) and (6).	No. of other Operations.	
			Ex-tracted.	Filled	Ex-tracted.	Filled.			Permanent and Temporary Teeth.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) Local. Gas.	(10)	
56	884	9314	1642	5132	7627	777	5909	3066 14	548	

F.—TREATMENT OF ALL OTHER DEFECTS.

DEFECT OR DISEASE.					Number of Children.			
					Referred for Treatment.	Treated.		
						Under Local Education Authority's Scheme.	Otherwise.	Total.
MALNUTRITION	...	...	...	...	62		34	34
ENLARGED CERVICAL GLANDS (Non-Tubercular)	...			...	13		13	13
DEFECTIVE SPEECH	...	...	...	...
HEART AND CIRCULATION	{	Heart Disease :			36			
		Organic	...				32	32
		Functional	...		77		64	64
LUNGS	{	Anæmia	...	...		
		Bronchitis	...	...	119		78	78
		Other Non-Tubercular Diseases	...	...	41		24	24
TUBERCULOSIS	{	Pulmonary :						
		Definite	...	...	119		119	119
		Suspected	...	...	173		170	170
		Non-Pulmonary :						
		Glands	...	...	7		7	7
		Spine	...	...	10		10	10
		Hip	...	...	6		6	6
		Other Bones and Joints	...	...	5		5	5
		Skin	...	...	3		3	3
NERVOUS SYSTEM	{	Other Forms	...	...	12		12	12
		Epilepsy	...	...	34		32	32
		Chorea	...	...	64		59	59
DEFORMITIES	{	Other Conditions	...	...	39		37	37
		Rickets	...	...	16		11	11
		Spinal Curvature	...	...	45	28		28
Other Defects and Diseases	{	Other Forms	...	...	45	5	22	27
			...	...	263		207	207

TABLE V.

SUMMARY OF TREATMENT OF DEFECTS AS SHOWN IN TABLE IV.
(A, B, C, D and F, but excluding E).

Disease or Defect	Number of Children			
	Referred for Treatment	Treated		
		Under Local Education Authority's Scheme	Otherwise	Total
Minor Ailments	3163	2498	501	2999
Visual Defects	1431	696	260	956
Defects of Nose & Throat	1579	1116	71	1187
Dental Defects	*6623	5727	101	5828
Other Defects	1189	33	945	978
Total	13,985	10,070	1,878	11,948

* This figure includes cases referred by both doctor and dentist.

TABLE VI.

SUMMARY RELATING TO CHILDREN MEDICALLY INSPECTED AT THE
ROUTINE INSPECTIONS DURING THE YEAR 1921.

(1) The total number of children medically inspected at the Routine Inspections	10827
(2) The number of children in (1) suffering from :—	
Malnutrition (i.e. Subnormal)	481
Skin Disease	138
Defective Vision (including Squint)	3112
Eye Disease	177
Defective Hearing	113
Ear Disease	111
Nose and Throat Disease ... { Slight	1570
... { Marked	652
Enlarged Cervical Glands (non-tubercular) { Slight	747
... { Marked	576
Defective Speech	55
Dental Disease	2999
Heart Disease :—	
Organic	108
Functional	59
Anæmia	207
Lung Disease (non-tubercular)	501
Tuberculosis :—	
Pulmonary—Definite	5
Suspected	31
Non-Pulmonary	8
Disease of the Nervous System	35
Deformities	355
Other Defects and Diseases	930
(3) The number of children in (1) suffering from defects (other than uncleanliness or defective clothing or footgear) who require to be kept under observation (but not referred for treatment)	440
(4) The number of children in (1) who were referred for treatment (excluding uncleanliness, defective clothing, etc.)	1839
(5) The number of children in (4) who received treatment for one or more defects (excluding uncleanliness, defective clothing, etc.)	1122

SECONDARY SCHOOLS.

TABLE I. (SECONDARY).

NUMBER OF CHILDREN INSPECTED 1ST JANUARY, 1921,
TO 31ST DECEMBER, 1921.

A.—ROUTINE MEDICAL INSPECTION.

Age	5	6	7	8	9	10	11	12	13	14	15	Total
Boys	10	10	16	24	—	1	155	57	2	211	53	539
Girls	15	14	31	31	43	—	90	151	72	63	46	556
Total	25	24	47	55	43	1	245	208	74	274	99	1095

B.—SPECIAL INSPECTIONS.

			Special Cases.	Number of Children re-examined.
Boys	...	...	39	204
Girls	...	...	37	324
Total	...	...	76	528

C.—TOTAL NUMBER OF INDIVIDUAL CHILDREN INSPECTED BY THE
MEDICAL OFFICER, WHETHER AS ROUTINE OR SPECIAL CASES
(no child being counted more than once in one year).

Number of Individual Children Inspected.

1,167

TABLE II. (SECONDARY.)

RETURN OF DEFECTS FOUND IN THE COURSE OF MEDICAL INSPECTION, 1921.

DEFECT OR DISEASE.				ROUTINE INSPECTIONS		SPECIALS.	
				Number referred for treatment.	Number requiring to be kept under observation, but not referred for treatment.	Number referred for treatment.	Number requiring to be kept under observation, but not referred for treatment.
(1)				(2)	(3)	(4)	(5)
MALNUTRITION				7	8	7	5
UNCLEANLINESS, Head				4		2	
SKIN	{	Ringworm, Head				1	
		Scabies	2				
		Impetigo			2		
		Other Diseases (Non-Tubercular)	3		5		
EYE	{	Blepharitis	1	1	1	1	
		Conjunctivitis	1				
		Corneal Ulcer			1		
		Defective Vision	109	7	29		
		Squint	3		1		
		Other Conditions			1		
EAR	{	Hearing	7	2	7		
		Otitis Media	3		2		
		Other Ear Diseases	3				
NOSE AND THROAT	{	Tonsils	15	19	5	3	
		Adenoids	2		1		
		Tonsils and Adenoids	2	1	8		
		Nose Obstruction	7		5		
		Mouth-breather	19	7	10	3	
		Other Conditions	2	1	3		
TEETH				152	1	17	
HEART	{	Organic	4	24	7	11	
		Functional	1	1	1	1	
		Anæmia	16	1	7		
LUNGS	{	Bronchitis	3	3	4		
		Other Non-Tubercular Diseases	2	6	3		
TUBERCULOSIS Suspected Phthisis					1		1
NERVOUS SYSTEM	{	Chorea		2			
		Other Conditions	3	2	2		
DEFORMITIES	{	Scoliosis	83	19	52	4	
		Kyphosis	9	2	8		
		Other forms	80	14	32	1	
Other Defects and Diseases				77	32	30	3

Number of Individual Children having Defects which required Treatment,
or to be kept under observation ... 796.

TABLE V. (SECONDARY).

SUMMARY OF TREATMENT OF DEFECTS.

Disease or Defect.	Number of Children.			
	Referred for Treatment.	Treated.		
		Under Local Education Authority's Scheme.	Otherwise.	Total.
Minor Ailments ...	39	6	26	32
Visual Defects ...	132	18	53	71*
Defects of Nose & Throat	50	12	17	29
Dental Defects ...	169	4	69	73
Deformities ...	264	57	154†	211
Other Defects ...	151	—	110	110
Total	805	97	429	526

* 12 of these cases were brought forward from previous year.

† These cases were of a slight nature and were treated at school by the drill instructors.

The number of children actually treated is probably much greater than is represented in this table. This is due to the fact that defects are being revealed by medical inspection until late in the year. Since the Board of Education require the table to be compiled in January there is no opportunity for re-inspection and consequently the present condition is unknown.

TABLE VI. (SECONDARY).

SUMMARY RELATING TO CHILDREN MEDICALLY INSPECTED AT THE
ROUTINE INSPECTIONS DURING THE YEAR 1921.

(1) The total number of children medically inspected at the routine inspections	1095
(2) The number of children in (1) suffering from defects (other than uncleanness or defective clothing or footgear) who require to be kept under observation (but not referred for treatment) ...	150
(3) The number of children in (1) suffering from :—	
Malnutrition (<i>i.e.</i> subnormal)	69
Skin Disease	40
Defective Vision (including Squint)	198
Eye Disease	13
Defective Hearing	39
Ear Disease	3
Nose and Throat Disease—Slight	136
Marked	75
Enlarged Cervical Glands (non-tubercular)—Slight	51
Marked	173
Defective Speech	1
Dental Disease	157
Heart Disease—Organic	14
Functional	27
Anæmia	54
Lung Disease (non-tubercular)	54
Tuberculosis—Pulmonary, Definite	—
Suspected	—
Non-pulmonary	—
Disease of the Nervous System	19
Deformities	364*
Other Defects and Diseases	310
(4) The number of children in (1) who were referred for treatment (excluding uncleanness, defective clothing, etc.)	471
(5) The number of children in (4) who received treatment for one or more defects (excluding uncleanness, defective clothing, etc.)	296

*This figure includes all slight defects, e.g. round shoulders, flat chest, etc.